

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**The Folger Coffee Company
Gentilly Plant
New Orleans, Orleans Parish, Louisiana
Agency Interest Number: 1140
Activity Number: PER20050006
Proposed Permit Number: 2140-00005-V4**

I. APPLICANT

Company:
The Folger Coffee Company
14601 Old Gentilly Hwy
New Orleans, Louisiana 70129

Facility:
Gentilly Plant
14601 Old Gentilly Hwy
New Orleans, Louisiana 70129
Approximate UTM coordinates are 219.3 kilometers East and 3326.2 kilometers North, Zone 16

II. FACILITY AND CURRENT PERMIT STATUS

Folgers' Gentilly Plant is the largest of three Procter & Gamble coffee plants in the United States. Coffee production begins with the receipt of green beans which are roasted, ground, and packaged in vacuum sealed bags and canisters.

Green Bean Handling

Trucks deliver green coffee beans to the Gentilly Plant where they are unloaded in bulk and then air conveyed to the bean storage silos. A dust filter system is used to collect emissions from green bean handling equipment.

From the bean storage silos, green coffee beans are fed to the continuous and batch roasters and to the instant batch roasters.

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R&G Process

The beans leaving the continuous and batch roasters are processed into vacuum-packed bags or plastic containers. Storage silos collect beans from the roasters. Grinders receive beans from the silos, grind the beans, and then the ground coffee is conveyed to the packing line where it is sealed in the package.

Controls for the R&G process include: scrubbers and afterburners on the roasters; baghouse on all receivers, bins, and transfer points; and de-misters on the vacuum pumps for the packing lines.

Instant Process

Holding bins receive beans from the instant batch roasters. The beans are ground and weighed before being sent into the extraction columns where coffee solids are extracted with hot water. The extract is centrifuged and evaporated until the desired liquor concentration is achieved. The remaining solids in the column are fed to a screw press and used as boiler fuel or sent off-site as land fill. The liquor is pumped to the spray dry tower, atomized at the top of the large metal vertical chamber, and dried on the free fall, as hot air is blown upward in the chamber. Purchased powder may be added once the spray dried powder reaches the modifier. The modifier converts the powder into the desired texture of the final product. Totes are used to collect and store the product.

Controls for the instant process include: chaff arrestors and an afterburner on the roasters; baghouses on all receivers, bins and transfer points; and scrubbers.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application was submitted on June 16, 2005 requesting a Part 70 operating permit for the Gentilly Plant. Additional information dated January 10, 2006, March 17, 2006, March 4, 2006, May 20, 2006, May 26, 2006 August 25, 2006, February 2, 2007, March 1, 2007 and April 20, 2006 was also received.

Project

This permit is the renewal to the Part 70 operating permit issued May 25, 2005. With this permit renewal, Folgers requests the following changes:

- Reconciliation of seven new emission sources permitted in the Stand Alone Title V permit for Folgers' Hurricane Preparedness Project which are listed below.

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- Two (2) 6.82 MM BTU/hr Diesel Fired Auxiliary Generator.
- Four (4) Diesel Storage Vessels - 20,000 gallons each.
- Preprocessed Coffee Bean Truck loading and transfer filter receiver.
- Other changes include calculation methodology, hours of operation, control equipment efficiency, control equipment codes, source descriptions, reconciliation of project as-built changes, typo correction, and deleted sources.

Proposed Permit

Permit no. 2140-00005-V4 will be the renewal and modification of Part 70 operating permit no. 2140-00005-V3 for the Gentilly Plant.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>		<u>After</u>	<u>Change</u>
	<u>No. 2140-00005-V3</u>	<u>No. 3038-V0</u>		
PM ₁₀	207.46	0.69	222.91	+ 14.76
SO ₂	58.63	3.65	62.30	+ 0.02
NO _x	139.91	21.63	154.21	- 7.33
CO	477.13	4.96	491.17	+ 9.08
VOC	106.87	0.64	117.22	+ 9.71
TRS*	0.72	-	0.72	-

* Total Reduced Sulfur

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
Acetaldehyde	1.23	1.24	+ 0.01
Acrolein	1.87	1.88	+ 0.01
Phenol	0.86	0.86	-
Total	3.96	3.98	+ 0.02

Other VOC (TPY): 113.24

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IV. REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note
Facility Wide	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33.III. Chapter 51]	DOES NOT APPLY. Minor source of toxic air pollutants.
6, 7, 8, 5-74, 4-00, 5-00, 56- 00 thru 61-00	Waste Gas Disposal [LAC 33.III.2115]	EXEMPT. VOC concentration in vent stream less than 30,000 ppm.
17-03, 18-03, 19-03	NESHAP Subpart Q National Emission Standards for HAPs for Industrial Cooling Towers [40 CFR 63.400]	DOES NOT APPLY. The cooling towers do not use chromium based water treatment chemicals.
5-06, 6-06, 7-06, 8-06	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Storage tank has a capacity greater than 19,813 gallons (75m ³), but less than 39,890 gallons (151m ³) with a maximum true vapor pressure less than 2.18 psia.

Prevention of Significant Deterioration/Nonattainment Review

NA

Streamlined Equipment Leak Monitoring Program

NA

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MACT Requirements

NA

Air Quality Analysis

Dispersion Model(s) Used: ISCST3 (Screen)

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
PM ₁₀	Annual Average	29.40 µg/m ³	50 µg/m ³
PM ₁₀ * 4 th High	24 hour	141.20 µg/m ³ *	150 µg/m ³

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

NA

VI. PERIODIC MONITORING

NA

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VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

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VII. GLOSSARY (Cont'd)

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.